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REMARKS

An excess claim fee payment letter is submitted herewith for one (1) additional independent claim.

Claims 1-24 are all the claims presently pending in the application. Claims 9 and 14-15 are amended to more clearly define the invention. Claims 1, 9-10, 12, 14-17, and 24 are independent.

These amendments are made only to more particularly point out the invention for the Examiner and not for narrowing the scope of the claims or for any reason related to a statutory requirement for patentability.

Applicant also notes that, notwithstanding any claim amendments herein or later during prosecution, Applicant's intent is to encompass equivalents of all claim elements.

Entry of this §1.116 Amendment is proper. Since the Amendments above narrow the issues for appeal and since such features and their distinctions over the prior art of record were discussed earlier, such amendments do not raise a new issue requiring a further search and/or consideration by the Examiner. As such, entry of this Amendment is believed proper and Applicant earnestly solicits entry. No new matter has been added.

Applicant gratefully acknowledges that claims 1-8, 10-13, and 16-24 are allowed. However, Applicant respectfully submits that all of the claims are allowable.

Claims 14-15 stand rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by the Bastiani et al. reference.

This rejection is respectfully traversed in the following discussion.

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I. THE CLAIMED INVENTION

A first exemplary embodiment of the claimed invention, as defined by independent claim 14, is directed to a communication method for a network node attached to a serial bus. the method includes setting a state machine in a receive mode, exchanging signals between the network node and a remote node attached to a distant end of the bus and determining a turnaround time between the nodes based upon the turnaround time of the signals between the network node and the remote node, and setting the state machine in an idle mode for an interval beginning with an end timing of a packet transmitted from the node to the bus until the interval corresponds to the turnaround time.

A second exemplary embodiment of the claimed invention, as defined by independent claim 15, is directed to a communication method for a network node attached to a serial bus. The method includes setting a state machine in a receive mode, incrementing a time count value beginning with a start timing of a child notify signal transmitted from the node to the bus and terminating the increment of the time count value at an end timing of a parent notify signal received by the node from the bus, and setting the state machine in an idle mode for an interval beginning with an end timing of a packet transmitted from the node to the bus until the interval corresponds to the incremented time count value

As explained in response to the previous Office Action, the present invention solves problems by ensuring that the transceiver in the network maintains an Idle state for a period of time that corresponds to the turnaround time between other nodes.

The first exemplary embodiment, as recited by, for example, independent claim 14, determines the turnaround time based upon the turnaround time of the signals between the network node and the remote node.

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The second exemplary embodiment, as recited by, for example, independent claim 15, determines the turnaround time by incrementing a time count value beginning with a start timing of a child notify signal transmitted from the node to the bus and terminating the increment of the time count value at an end timing of a parent notify signal received by the node from the bus.

In this manner, these exemplary embodiments do not rely upon some arbitrarily assigned or predetermined turnaround time. Rather, these exemplary embodiments determine the actual turnaround time.

II. THE PRIOR ART REJECTION

The Examiner continues to allege that the Bastiani et al. reference teaches the claimed invention. Applicant submits, however, that there are elements of the claimed invention which are neither taught nor suggested by the Bastiani et al. reference.

We respect to claim 14, the Bastiani et al. reference does not teach or suggest the features of the present invention including: 1) determining a turnaround time between the nodes based upon the turnaround time of the signals between a network node and a remote node; and 2) setting a state machine in an idle mode for an interval beginning with an end timing of a packet transmitted from the node to the bus until the interval corresponds to the turnaround time.

In this manner, the present invention is capable of determining the turnaround time between nodes based upon the exchange of signals between the network node and the remote node, rather than an arbitrarily assigned turnaround time.

The present invention is also capable of placing the node into an idle condition for a

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period of time that matches the turnaround time after transmitting a packet, thereby avoiding contention between signals between nodes which are separated by a distance that is greater than 4.5 meters (page 8, lines 2-9 and page 14, lines 13-17).

In stark contrast, the Bastiani et al. reference merely discloses forcing a device to wait for an arbitrarily assigned, predetermined turnaround time between the time of receiving a signal and responding to the signal to ensure that the bus line has settled and to provide enough time for the other one of the slave/host to activate its receiver (col. 24, lines 19-27 and col. 42, lines 31-42).

Therefore, the "turnaround" time that is disclosed by the Bastiani et al. reference is not determined based upon the turnaround time of the signals between the network node and the remote node.

Rather, the Bastiani et al. reference explains that the "turnaround time is 2 byte times to allow the line to settle and to allow the host to enable its receiver." (Emphasis added, col. 42, lines 39-41).

Indeed, the Bastiani et al. reference does not explain how this turnaround time is determined, let alone teach or suggest that the turnaround time is based upon the turnaround time of the signals between the network node and the remote node.

Rather, the Bastiani et al. reference would seem to suggest to one of ordinary skill in the art that the turnaround time may have been experimentally derived based upon the amount of time that is required for the "line to settle and to allow the host to enable its receiver."

Thus, the "turnaround time" that is disclosed by the Bastiani et al. reference is clearly not based upon the turnaround time of the signals between the network node and the remote node between nodes as recited by claim 14.

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The Examiner does not contradict this fact. In the “*Response to Arguments*” of the December 28, 2004, Office Action, the Examiner acknowledges Applicant’s traversal that points out that the Bastiani et al. reference does not teach or suggest determining the turnaround time between nodes based upon the exchange of signals between the network node and the remote node. The Examiner then states that “Examiner respectfully disagrees.”

However, the Examiner does not contradict the Applicant’s traversal.

Rather, the Examiner merely regurgitates the facts that the Applicant previously explained to the Examiner. The Examiner agrees with the Applicant by stating: “A slave device (the remote node) sensing the end of the packet and wishing to send a response must wait 20 ns minimum (turnaround time) before a transmission (an idle mode). When a response is required from the device the line is turned around to the host and transmission initiated. The turnaround time is a time to allow the line to settle and to allow the host to enable a receiver.” (Emphasis added).

Applicant does not disagree with this explanation of the device that is disclosed by the Bastiani et al. reference.

Indeed, the Examiner confirms the point that the Applicant has repeatedly pointed out that the device disclosed by the Bastiani et al. reference “must wait 20 ns minimum (turnaround time).

In other words, the Examiner admits that the Bastiani et al. reference merely discloses forcing a device to wait for an arbitrarily assigned, predetermined turnaround time (i.e. 20 ns).

Clearly, the Bastiani et al. reference does not teach or suggest determining the turnaround time between nodes based upon the exchange of signals between the network

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node and the remote node.

The Examiner's "*Response to Arguments*" does not contradict this fact.

Further, as explained above, the turnaround time of the present invention is used to place a node into an idle state after which that node has transmitted a packet.

In stark contrast, the Bastiani et al. reference explains that the node waits for a predetermined, arbitrarily assigned turnaround time after that node has received a packet. The Bastiani et al. reference explains that "[a] slave device sensing the end of the packet and wishing to send a response must wait 20ns at a minimum before enabling the driver and starting the transmission. Similarly, the host after a packet from the slave device and wishing to send a packet to the [slave] device must wait 20 ns minimum from the end of the received packet." (Emphasis added, col. 24, lines 21-27).

Additionally, with respect to independent claim 15, the Bastiani et al. reference does not teach or suggest the features of the present invention including: 1) incrementing a time count value beginning with a start timing of a child notify signal transmitted from a node to a bus and terminating the increment of the time count value at an end timing of a parent notify signal received by the node from the bus; and 2) setting a state machine in an idle mode for an interval beginning with an end timing of a packet transmitted from the node to a bus until the interval corresponds to the incremented time count value.

In a manner similar to that recited by independent claim 14, the exemplary embodiment recited by independent claim 15, determines the actual turnaround time by incrementing a time count value beginning with a start timing of a child notify signal transmitted from a node to a bus and terminating the increment of the time count value at an end timing of a parent notify signal received by the node from the bus.

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Thus, the exemplary embodiment recited by independent claim 15, is able to determine the actual turnaround time and is not forced to rely upon some arbitrarily-assigned, or otherwise predetermined turnaround time as is disclosed by the Bastiani et al.

Clearly, the Bastiani et al. reference does not teach or suggest incrementing a time count value beginning with a start timing of a child notify signal transmitted from a node to a bus and terminating the increment of the time count value at an end timing of a parent notify signal received by the node from the bus as recited by claim 15.

Therefore, the Bastiani et al. reference does not teach or suggest each and every element of the claimed invention and the Examiner is respectfully requested to withdraw this rejection of claims 14-15.

III. FORMAL MATTERS AND CONCLUSION

In view of the foregoing amendments and remarks, Applicant respectfully submits that claims 1-24, all the claims presently pending in the Application, are patentably distinct over the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the Application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

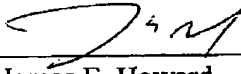
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The Commissioner is hereby authorized to charge any deficiency in fees or to credit any overpayment in fees to Attorney's Deposit Account No. 50-0481.

Respectfully Submitted,

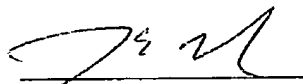
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CERTIFICATION OF FACSIMILE TRANSMISSION

I hereby certify that I am filing this Amendment by facsimile with the United States Patent and Trademark Office to Examiner Saba Tsegaye, Group Art Unit 2662 at fax number (703) 872-9306 this 16th day of March, 2005.


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